

A research study on investors behaviour regarding choice of asset allocation of teaching staff

Gobinda Dhamala¹, Khushboo Sharma², Kunal Jaiswal³, Dimple Patel⁴, Pooja Singh⁵, Ritu Sinha⁶

*^{1,2,3,4,5,6} Research Scholar, Parul Institute of Business Administration, Parul University, Baroda, India
Email: gobindadhamala10@gmail.com*

ABSTRACT

Every rational economic decision maker would prefer to avoid a loss, to have benefits be greater than costs, to reduce risk, and to have investments gain value. Loss aversion refers to the tendency to loathe realizing a loss to the extent that you avoid it even when it is the better choice. How can it be rational for a loss to be the better choice? Say you buy stock for \$100 per share. Six months later, the stock price has fallen to \$63 per share. You decide not to sell the stock to avoid realizing the loss. If there is another stock with better earnings potential, however, your decision creates an opportunity cost. You pass up the better chance to increase value in the hopes that your original value will be regained. Your opportunity cost likely will be greater than the benefit of holding your stock, but you will do anything to avoid that loss. Loss aversion is an instance where a rational aversion leads you to underestimate a real cost, leading you to choose the lesser alternative. Aim of this paper is to identify the various factors which are affecting to the investment decision and behavioural finance.

Keywords: Behavioural Finance, Assets Allocation, Investment Alternatives.

1. INTRODUCTION

Asset allocation- Asset allocation is an investment strategy that aims to balance risk and reward by apportioning a portfolio's assets according to an individual's goals, risk tolerance, and investment horizon. The three main asset classes – equities, fixed-income, and cash and equivalents - have different levels of risk and return, so each will behave differently over time.

There are several different asset classes:

Traditional Assets

- Stocks/Equities – Stocks, or equities, have historically offered the highest risk and highest returns. But, not all stocks are the same. Large-cap stocks are less risky and small-cap stocks have more risk. Investors willing to put up with the volatility of stocks have realized the best positive returns over time.
- Bonds & Fixed Income – Bonds have historically had less volatility than stocks, but the trade-off is that they offer more modest returns. But, there are some types of bonds that are riskier, such as junk bonds and high-yield bonds. Investors with a short time horizon often keep their investments in bonds since they offer stability and income.
- Cash & Cash Equivalents – Cash and equivalents are the least risky asset class since there's very little risk of losing capital. In addition to cash, these investments might include certificates of deposit, Treasury bonds, or other cash-like securities.

Alternative assets

- Commodities: precious metals, nonferrous metals, agriculture, energy, others.
- Commercial or residential real estate (also REITs)
- Collectibles such as art, coins, or stamps
- Insurance products (annuity, life settlements, catastrophe bonds, personal life insurance products, etc.)
- Derivatives such as long-short or market neutral strategies, options, collateralized debt, and futures
- Foreign currency
- Venture capital
- Private equity
- Distressed securities
- Infrastructure
- Hedge funds

Selecting the right asset allocation depends on several factors, including:

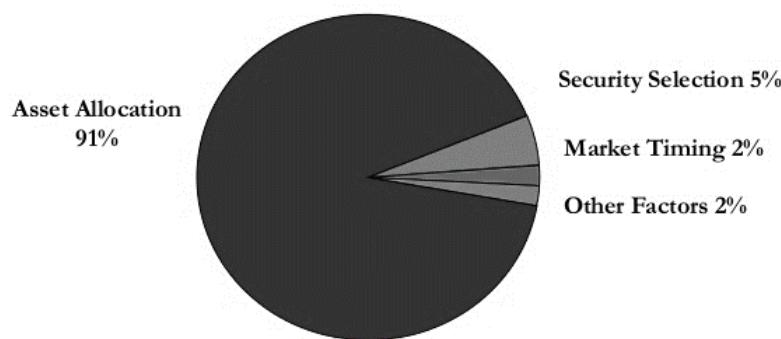
- Time Horizon – The number of months or years until your financial goal is the primary factor driving asset allocation. Investors saving up for retirement often invest in riskier assets since they have a long time horizon, while a parent saving up for a teenager's college education may stick to less risky investments since they have a shorter time horizon.
- Risk Tolerance – The second major factor influencing asset allocation is an investor's risk tolerance. In other words, their ability and willingness to lose some or all of their original investment in exchange for greater returns. Aggressive investors may be willing to take on higher risk to get better returns, while conservative investors may stick with low-risk investments aimed more at capital preservatives.

The Importance of Asset Allocation

Asset allocation helps investors reduce risk through *diversification*. Historically, the returns of stocks, bonds, and cash haven't moved in unison. Market conditions that lead to one asset class outperforming during a given timeframe might cause another to underperform. The result is less volatility for investors on a portfolio level since these movements offset each other.

In addition to diversification, asset allocation is essential to ensure that you reach your financial goals. An investor that isn't taking on enough risk might not generate high enough returns to reach their goal, while an investor that's taking on excessive risk may not have enough money when they need to access it. Selecting the right asset allocation helps avoid these issues by ensuring that a portfolio is ideally positioned to reach a goal.

The Importance of Asset Allocation



Based on academic research conducted by Brinson, Beebower, and Singer (*Financial Analysts Journal*, 47(3), 1991).

A general rule of thumb for asset allocation-

While it's admittedly not perfect, a quick rule of thumb is to take your age and subtract it from the number 110 in order to find out how much of your money should be in equities. For most people, the remainder should be in fixed-income, with some cash for those at or near retirement.

For example, if you're 40 years old, this implies that 70% of your portfolio should be invested in equities, with the other 30% in fixed income. Note that this rule assumes you do not already have the money you need to achieve all your financial goals, including funding a comfortable retirement.

How to Pick the Best Asset Allocation for You

- Identify your objectives and time horizon-Your first step in creating an effective asset allocation strategy is identifying your goals and considering how much time you have to reach these objectives.
- Assess your risk tolerance- Identifying the amount of damage a company, industry, country or an individual could hold.

- Identify your target portfolio- Portfolio is a group of assets. Such as bonds, securities, currencies and cash equivalents. Right portfolio is necessary to be selected as it is the most prior point to identify the risk involved in it.
- Select your investments- Selection of the investment is the second last step, after viewing the determined hazard involved.
- Review and rebalance- On most cases the outcomes are certainly different as compared to the standards. In such case the rebalancing and overview of the portfolio is executed.

Framing

Framing refers to the way you see alternatives and define the context in which you are making a decision. Your framing determines how you imagine the problem, its possible solutions, and its connection with other situations. A concept related to framing is mental accounting: the way individuals encode, describe, and assess economic outcomes when they make financial decisions. In financial behaviour, framing can lead to short-sighted views, narrow-minded assumptions, and restricted choices.

Every rational economic decision maker would prefer to avoid a loss, to have benefits be greater than costs, to reduce risk, and to have investments gain value. Loss aversion refers to the tendency to loathe realizing a loss to the extent that you avoid it even when it is the better choice.

How can it be rational for a loss to be the better choice? Say you buy stock for \$100 per share. Six months later, the stock price has fallen to \$63 per share. You decide not to sell the stock to avoid realizing the loss. If there is another stock with better earnings potential, however, your decision creates an opportunity cost. You pass up the better chance to increase value in the hopes that your original value will be regained. Your opportunity cost likely will be greater than the benefit of holding your stock, but you will do anything to avoid that loss. Loss aversion is an instance where a rational aversion leads you to underestimate a real cost, leading you to choose the lesser alternative.

Loss aversion is also a form of regret aversion. Regret is a feeling of responsibility for loss or disappointment. Past decisions and their outcomes inform your current decisions, but regret can bias your decision making. Regret can anchor you too firmly in past experience and hinder you from seeing new circumstances. Framing can affect your risk tolerance. You may be more willing to take risk to avoid a loss if you are loss averse, for example, or you may simply become unwilling to assume risk, depending on how you define the context.

Framing also influences how you manage making more than one decision simultaneously. If presented with multiple but separate choices, most people tend to decide on each separately, mentally segregating each decision. By framing choices as separate and unrelated, however, you may miss making the best decisions, which may involve comparing or combining choices. Lack of diversification or over diversification in a portfolio may also result.

Investor Profiles

An investor profile expresses a combination of characteristics based on personality traits, life stage, sources of wealth, and other factors. What is your investor profile? The better you can know yourself as an investor, the better investment decisions you can make. Researchers have identified some features or characteristics of investors that seem to lead to recognizable tendencies.

Stage	Ages	Investment Goals
Starting	25–40	Eliminating debt Saving for capital expenditures Investing in employee benefits
Accumulating	40–65	Managing debt Diversifying and building equity Saving for retirement and estate planning
Spending	65–80	Relying on retirement income Reducing investment risks Preserving value; preserving or reinvesting capital
Gifting	80+	Eliminating risk Distributing wealth

These “definitions” are fairly loose yet typical enough to think about. In each of these stages, your goals and your risk tolerance—both your ability and willingness to assume risk—change. Generally, the further you are from retirement and the loss of your wage income, the more risk you will take with your investments, having another source of income (your pay check). As you get closer to retirement, you become more concerned with preserving your investment’s value so that it can generate income when it becomes your sole source of income in retirement, thus causing you to become less risk tolerant. After retirement, your risk tolerance decreases even more, until the very end of your life when you are concerned with dispersing rather than preserving your wealth.

Risk tolerance and investment approaches are affected by more than age and investment stage, however. Studies have shown that the source and amount of wealth can be a factor in attitudes toward investment.

Those who have inherited wealth or come to it “passively,” tend to be much more risk averse than those who have “actively” created their own wealth. Entrepreneurs, for example, who have created wealth, tend to be much more willing to assume investment risk, perhaps because they have more confidence in their ability to create more wealth should their investments lose value. Those who have inherited wealth tend to be much more risk averse, as they see their wealth as a windfall that, once lost, they cannot replace.

Active wealth owners also tend to be more active investors, more involved in investment decisions and more knowledgeable about their investment portfolios. They have more confidence in their ability to manage and to make good decisions than do passive wealth owners, who haven’t had the experience to build confidence.

Not surprisingly, those with more wealth to invest tend to be more willing to assume risk. The same loss of value is a smaller proportional loss for them than for an investor with a smaller asset base.

Many personality traits bear on investment behaviour, including whether you generally are:

- confident or anxious,
- deliberate or impetuous,
- organized or sloppy,
- rebellious or conventional,

An abstract or linear thinker

What makes you make the decisions that you make? The more aware you are of the influences on your decisions, the more you can factor them in—or out—of the investment process.

2. LITERATURE REVIEW

In Investors Attitude towards Investment Avenues- a study in Namakkal district By Kannan Jothilingam, KV. Kannan (2013) objective: to find out the main objective of the investors in namakkal district.

Research methodology: in this study the researcher has used the primary data generated from 300 responded selected in simple random sampling method in Namakkal district. It includes percentage analysis of variance and garrett ranking technique in which 213 were male and 87 were female.

This study displays and initial bifurcation between the demographical variables. Thereafter, its states the objective of investment and attitude of investors towards different investment avenues. The main focus of this research is derived by the relationship between demographic variable and objectives of investment. At last the respondents and there preferred are ranked.

An insight into the saving and investment pattern of salaried employee working in private sector of shipping industries at Ernakulam by Geethu Gopi, D. Priyanaka and R. Preetha (2018). Objective: is to study the employees behavioural pattern while making an ivesment in private sector in shipping industries and to identify the factor considered for suitable investment and also to identify the most preferred investment.

Research methodology: secondary data is used the nature of research is descriptive in nature. The study compreise of 100 salaried people out of 100 employees only 77 employed response was generated. Out of that only 50 respondents filled the questionnaire was filled fully. Thus, the sample was limited to 50 people.

Statistical tool used: t-test, chi-square analysis, correlation analysis, percentage method.

In this research it is ascertained that the workforce have realised the importance of money and its benefit with growing economic level and consciously try to spend money and focus more on saving aspects by not falling into the marketing schemes of fashionable commodities. In this particular research it has been

also found that most of the employees save for the personal derived benefit, which includes saving for their own education or child, marriage, housing etc. According to this research it can also be said that the employees are not that much willing to take risk when there comes a question of survival.

Impacting factors on individual investors' behaviour towards commodity market in India by N Elankumaran, AA Ananth (2013). Objective: to identify all the major factors influencing the decision making and behavioural aspect of investors.

Research methodology: primary data is collected through questionnaire. 15 items were there and based on that 525 responses were generated.

According this research the major aspect of investors' behaviour in Indian commodity market is influenced by the factors like low risk and high risk involvement, objectives of the investors and knowledge about the commodity market in India. The significance level of all these factors that influencing the investors' behaviour is 95%. This study is based on the concept of the behavioural finance concept. The studying of this concept aids the investors and the owner in the policy making and strategy laying. Primary source of date are collected from the respondents.

Analysis of investment behaviour with reference to retail investor of Rachi in Indian stock market By Jyoti kumari (January 2017). Objective: to study the pattern of investment of retail investors based at rachi. To increase the risk taking capacity of investors.

Research methodology: the primary data is collected from the retail investor on their trading pattern, risk appetite and behavioural fact that determine the investment decisions and the non investors on why they don't prefer to invest on equity.

Statistical tool used: cluster sampling, correlation analysis

In this research article the results are ascertained by the following five basis

- Relating to investment pattern of retail investor
- Relating to ascertaining risk appetite score of the respondents
- Relating to the demographic data – risk tolerance capacity of the respondents
- Relating to strategies for different cluster of respondents
- Relating to non- investor no preference to invest on equity

The conclusion of this research are as the follows

- The pattern of investment by individual is influenced by the amount of risk involved in the avenues of involvement.
- 53.8% - low risk tolerance , 30% - moderate risk, 16.2% - high risk tolerance

Investment behaviour of college teacher with special reference to government and private college in Dhampuri district by A. Ushalashmi and Dr. k. Selvavinayagam (may 2019). Objective: to identify the saving and investment behaviour of college teacher in dhampuri districts in tamil nadu.

Research methodology: the data was secondary data and was collected from previous dissertations, thesis , books , research paper, websites and directorate of college education and department of higher education chaennai.

According this research it was concluded that the most of the private and government teaching employees of the Dhampuri district are afraid to invest in the financial market of India. As for them the most of the earning and saving from these are made for their personal purpose like marriage, education of child etc. Apart from that somehow they also lack in knowledge about the financial market of India and about its financial products. The people of this district usually prefer to invest in real estate and gold and the primary destination for their savings are banks. In case of any sort of emergency the residual savings are the only support.

Analysis of investment pattern of college teacher in kerala by Bindu Pk(2017)

Objective: to study investment behaviour of permanent college teacher in kerala. And to analysis the influencing factor for investment of respondents.

Research methodology: primary data collection, sample of 200 teacher were surveyed using structured questionnaire.

Statistical tool used: ANOVA table, SEM, percentage, regression coefficient

In this article study it is constituted that the employees want money with some extra benefits on providing services. It was also noted that very less no of employees are ready to invest in risky funds. It was also

seen that most of them have provident fund and only few of them are willing to invest in companies share, bonds. According to the research the literacy rate of the college is very high and paper also focuses on determining the factors influencing their behaviour regarding investment. The main influencing factor are the tax benefits, risk involved, high returns, capital appreciations etc. apart from this the study also helps in creating awareness about investing in higher financial market.

Analysis of individual investor behaviour towards mutual funds as an investment tool in pune by Ashwini Shankar kadam , Dr. Pradip Sanatkumar Padhye, Dr. Nilesh Tejrao kate (2019) . Objective: to identify and analyse the factor influencing for investor to invest in mutual fund as an investment tool in pune city.

Research methodology: primary data source through questionnaire sample size was of 100 investors from pune city only. Sampling technique used is non probability sampling.

This particular research article focuses on the investors' behaviour on mutual funds of pune city. It was also noted that mutual funds is considered most affordable financial product as both small as well as for large investors. The research mostly constitute of demographical variable. Following are the observations

- Share of investor form
 - Age 25-35= 25%
 - Age 35-50=28%
- In gender ration ratio
 - 70% - male
 - 30% - female
- In terms of education qualification
 - 45%- graduates
 - 28%-post graduates
 - 15%-professional education
- There is a direct relation between the investors with higher annual income and their tendency to invest in risky funds
- Investors have more trust on public sector funds than private funds
- It was observed that the major demand of mutual funds is due to higher return and tax benefits and professional management.

This study also attempts to ascertain the special interest of investor regarding investing in mutual funds, with describing the interest of individual investor of different classes and their view point about investing in mutual funds.

Analysis of individual investors' behaviour of stock market by Arup kumar Sarkar (2017)

Objective: to know the influence of demographic factors on investment behaviour and to find out how investor awareness affect the investment behaviour.

Research methodology: this study is based on primary data . 400 randomly selected individual of investors stock market from different district of west Bengal are responded completely to the questionnaire.

Statistical tool used: correlation coefficient, reliability test.

This study also indicates the demographic factors which influences the behaviour of investors in stock market. It reviled that from age 28-37 that invest most in stock market and are mostly graduated and above in qualification level. All these investor hope for long term return some of factors like marital status, gender and knowledge of investor and receiving guidance from licenced brokers affects the individual investor's behaviour. The study is done by collecting primary data Purba and Paschim Medinipur district in west Bengal.

Impact of psychological biases of investors in financial satisfaction by Muhammad Nauman Sadiq , Raja Ased Azad khan, Mohammad Kamran Bashir and Mahummad Ejaz (2018). Objective: to investigate the impact of investors' behavioural biases in their satisfaction with current financial position. Research methodology: 250 sample were taken through questionnaire, among which 220 were received back. 13 questionnaire were incomplete. So, study used 207 sample size.

Statistical tool use: multiple regression was conducted.

This study is based on six behavioural biases. And according to the research investor with overestimating their investment decision and categorise their funds into different group are more satisfied with their financial states than those with tendency of budgeting, reliance on expertise etc. The main focus is to identify whether the investors are happy with their current financial position or not.

An exploratory study of investment behaviour of investors by Mark kY Mak and WH Ip (2017).

Objective: this exploratory research aims at filling the identified research gap by proposing linear regression model of the financial investment behaviour of mainland Chinese and Hong Kong.

Statistical tool used: regression models, assumption analysis.

This research article highlights the hurdles of China and its financial market. As mainland China is different from Hong Kong. Therefore there is a huge difference in the interest pattern of the investors from both the places. But in some areas they are merged and it becomes difficult to understand the investing behaviour of both interested parties. This study bridges the gap and provides the clear understanding of both types of investors, their various factors.

Investors attitude towards adoption of online trading: a study on online investors behaviour in Vishakhapatnam by Krishna Mohan Vaddi , Merugn Pratima(2016). Objective: to examine the attitude of online investors towards the adoption of online trading in Vishakhapatnam city.

Research methodology: primary data collected through structured questionnaire. Sample size was 400.

Statistical tool used: group frequency distribution, Chi-Square test

The study focuses on providing suggestions like stock brokering firm should provide sufficient training programmes for such advancement. Apart from that it also suggests that online trading should be made easy. These are suggested because as per the response most of the respondents face problems during trading online. Maybe due to frauds, poor internet connections, lack of knowledge about the use of internet.

Exploring behavioural biases among Indian investors: a quantitative inquiry by Satish Kumar and Nisha Goyal (2018). Objective: to study the psychological factors influencing individual investors' investment decision making.

Research methodology: a qualitative research random sampling is done. The research was of 10-18 participants. The data was collected through interviews.

This study defines the behavioural aspect of that influences the decision making and interest of the investors. Understanding of their financial behavioural issues helps in financial planning and strategic management which advises them for future planning and additional knowledge. The only limitation of this research is that quantitative research cannot be generalized.

A study of the factors affecting the choice of investment portfolio by Individual investor in Singapore. A. Seetharaman, Indu Niranjan, Nitin Patwa, Amit Kejriwal (Aug-21, 2017)

Objective: this study aims to gain insights and information into the factors that affect investment planner, financial adviser, and individual need to consider improving their choice of the portfolio and its performance.

Research methodology: primary data were collected through online survey. The sample size was 206

Statistical tool used: t-test

This study is about the factors affecting individual investor behaviour and their portfolio in Singapore. According to their report it was seen that investment objective and asset familiarity play a central role in the choice of portfolio. The portfolio resume of individual depends upon the long term and short term objective of the individual. It is also seen that asset familiarity introduces the bias and creates the confidence that the returns are guaranteed. Hence, this will not lead to diversification of portfolio and this creates a need for awareness.

A study of saving and investment pattern of school teacher with special reference to Ahmednagar city, Maharashtra. By-Prof. Harshvardhan N. Bhavsar(2013)

Objective: the aim of the study is to determine the relationship between the saving and investment literacy among the school teacher

Research methodology: primary data was collected by distributing a structured questionnaire to 100 school teacher in different school of Ahmednagar city.

Statistical tool used: chi-square

This study shows that most of the expenses incurred and investment made by individuals are of personal nature. The study of this research is defined from the demographic variables of the city. The major finding of this article are that-

- Majority are female from age 25-45 B.ED, were married and managing their family expenditure only with their income.
- Majority of the respondents having income 2, 00,000-3, 00,000 and they consult from their spouse before making any decision.
- The number of respondents with less than saving of 5, 00,000 were three fourth of total respondents.
- Majority of investors are regular player and bank is their prime destination for investment.

Impact of social factors on individual investors trading behaviour. By Dr. R. Shanmugama and K. Ramya (2012).

Objective: to study the impact of social factors on attitude towards studying.

Research methodology: primary data was collected through structured questionnaire.

Statistical tool: correlation significance.

It was observed by the study that social intervention, media made a positive impact on the attitude of investors were as internet didn't make to have great impact on them.

Factors affecting individual investor behavior: empirical evidence from mutual fund investors in Dhaka city. By saptarshi dhar and S.M.kalbin salema and Arup Saha (July - December 2017)

Objective: to understand the mutual fund buying behaviour of individual investor and specific objective is to extract the various factors that investors consider important while buying mutual funds

Research methodology: quantitative analysis, sample selection was done from a list of investors which was prepared with the help of intermediaries and different brokerage house in Dhaka. Initially questionnaire was sent to 115 respondents and the usable responses was obtain a sample of 103

This research estates that "the investors have high expectations of return with the minimum of risk". The similar studies done in different periods and markets result the same, "the result shows that reputation of fund manager and return performance are important consideration for investment by the investors". These factors are considered most important factors.

It shows that the investment in mutual fund can be done by a middle class or high class person as the mutual fund are affordable to common investors. As the cost of the mutual fund are lower than the other investment strategies. So investors use to invest more in it. It is the one which can be afford by the common investor. The basic demographic profile of respondents provide the following information –

Factors and motives of savings and investment of teaching faculty in the affiliated colleges of alagappa university. by dr.g.parimalarani (july 2018.)

Objective: to analyse the various factor influencing the investment pattern of the respondents in the study area

Research methodology: primary data was collected. Targeted sample size was 1500 regular teaching staff. Random sampling was chosen for data collection. Out of 1500 chosen respondents were 315 randomly. Only 300 responses were collected.

Statistical tool used: factor analysis, correspondence analysis.

To analyse the various factors influencing the investment pattern of the respondents in the study area. This particular study was done.

This study made sense to understand the layouts of savings and investment of a decently earned salary by upper middle and middle class segment of an economy. It has mentioned that the upper middle and middle class salaried segment have real power to save and invest. This eventually estates that as the consumerism in an economy is growing so it directly have the effect in the saving and investment habit of an individual. The saving and investment is considered to be at less priority and maintenance of better lifestyle at high priority.

Saving habit and investment preference of government school teachers in vellore district. By v. Dhayalan ,c.r. senthilmathan , P. Venkatesh ,M. Krishnamoorthy (december 2018)

Objective: to investigate the socio demographic factors.

Research methodology: descriptive in nature. Population is 340 and 180 were the selected respondents under the simple random sampling

Statistical tool use: percentage analysis, multiple regression analysis

This study was done to find out the current saving and investing habit of the government school teacher. And what are the issues which are leading them to get rid of investment and saving. This study estates that government school teachers are focusing on saving and investment habit instead of spending money on the increasing living standard. They are more focused to save for their children and their needs (marriage, education, etc.) and achieving the other important goals. This all resulted in increasing the saving habits and enhance the investment habits.

Manasi kulkarni,dr.c.n.rawal (2016),”investment patterns of college teacher with respect to navi-mumbai city”, According to “ Manasi kulkarni and Dr.C.N.Rawal “ in(2016) it has found that the research study is based on the micro financial approach in respect of saving and investment habits considering unpredictable contingencies in the future followed by Gold, LIC,Bank deposits with the main purpose of children, education ,marriage and security after retirement.

Objective:

- Teacher’s community started recognizing the importance of investment and saving.
- Both male and female teachers are investing their net saving for the purpose of their education of children, marriage, and tax concession.
- Their most preferred avenues are all traditional investment like(Bank deposits ,government securities ,bullions(I.e. Gold and silver)
- The reason behind selecting those avenue is safety and has a security of their principal amount

Research methodology: both primary and secondary data.

3. CONCLUSION

From the above literature review researchers find out following main factors which are highly affected to the financial behaviour.

Direct demographic factors

- Income level
- Occupation
- No of family members
- Age group

Indirect demographic factors

- Educational qualification
- Gender

Reason why non investors don’t prefer to invest on equity

- Fear of being cheated , frauds
- Stock market volatility
- Lack of knowledge
- Lack of risk taking capacity
- Misleading data
- Negative words of mouth and lack of time to be vigilant

REFERENCES

1. INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH & DEVELOPMENT K. Jothilingam, Dr. K.V. Kannan. ISSN: 2278 – 0211 (Online) February, 2013 Vol 2 Issue 2
2. International Journal of Pure and Applied Mathematics Geethu Gopi, D. Priyanka and R. Preeth, Volume 118 No. 18 2018, 1347-1363 ISSN: 1311-8080 (printed version); ISSN: 1314-3395 (online version)

3. The International Journal's Research Journal of Science and Management 2 (12), 147-153, 2013 A Elankumaran, A.A Ananth, Volume: 02, Number: 12, April-2013 ,ISSN- 2251- 1571
4. ICFAI UNIVERSITY JHARKHAND RANCHI January 2017 DOCTOR OF PHILOSOPHY in MANAGEMENT BY Jyoti Kumari (13JU11300010)
5. International Journal of Research and Analytical Reviews (IJRAR) 2019 Volume 6, Issue 2 Ushalakshmi, Dr.K.Selvavinayagam (E-ISSN 2348-1269, P- ISSN 2349-5138)
6. International Journal of Advanced Research and Development ISSN: 2455-4030, Impact Factor: RJIF 5.24 www.advancedjournal.com Volume 2; Issue 2; March 2017; Page No. 87-89 By Bindu PK Mphil, St. Xaviers
7. Ashwini Shankar Kadam, Nilesh Tejrao Kate, & Pradip Sanatkumar Padhye. (2020). Our Heritage, 67(2), 1522-1532 ISSN:0474-9030Vol-67-Issue-2-July-December-2019Copyright Pacific Business Review International,Volume 10 Issue 7, January 2018 Arup Kumar Sarkar, Sidho-Kanho-Birsha University, Purulia West Bengal, India,Dr. Tarak Nath Sahu
8. Global Journal of Management and Business Research: C Finance Volume18 Issue 5 Version 1.0 Year 2018 ,Type: Double Blind Peer Reviewed,International Research Journal,Publisher: Global Journals Online ISSN: 2249-4588 & Print ISSN: 0975-5853,By Muhammad Nauman Sadiq, Raja Ased Azad Khan, Muhammad Kamran Bashir & Muhammad Ejaz Riphah InternationalUniversity
9. Mark KY Mak, Wao-Han Ip International Journal of Engineering Business Management 9, 1847979017711520, 2017
10. Asian Journal of Research in Business Economics and Management Vol. 6, No. 2, February 2016, pp. 12-31.ISSN 2249-7307 A Journal Indexed in Indian Citation Index ,Dr. Krishna Mohan Vaddadi; Dr. Merugu Pratima, DOI NUMBER-10.5958/2249-7307.2016.00008.6
11. SATISH KUMAR, Malaviya National Institute of Technology Jaipur, India NISHA GOYAL,Jain Univeristy Bangluru, India, 21 May 2019, IISES International Academic Conference, London ISBN 978-80-87927-46-5, IISES,DOI: 10.20472/IAC.2019.045.024
12. Accounting and Finance Research Vol. 6, No. 3; 2017 Published by Sciedu Press ISSN 1927-5986 E-ISSN 1927-5994 A.Seetharaman, Indu Niranjan2, Nitin Patwa3 & Amit Kejriwal4
13. IBMRD's Journal of Management and Research, Print ISSN: 2277-7830 Prof. Harshvardhan N. Bhavsar Assistant Professor at ASM's IPS, Pune. Volume-2, Issue-1, March 2013
14. Dr. R. Shanmughama, K. Ramyab, Economics and Finance 2 (2012) 237 – 246
15. A Quarterly Publication of Bangladesh Institute of Management (BIM) Management Development: Vol 31 No 3&4, July– December, 2017 Saptarshi Dhar,S.M. Kalbin Salema,Arup Saha
16. PARIPEX - INDIAN JOURNAL OF RESEARCH Volume-7 | Issue-7 | July-2018 | ISSN - 2250-1991 | IF : 6.761 | IC Value : 86.18 Dr.G.Parimalarani International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN (P): 2249-6890; ISSN (E): 2249-8001,Vol. 8, Special Issue 3, Dec 2018, 922-926 © TJPRC Pvt. Ltd.V. DHAYALAN1, C.R. SENTHILNATHAN2, P. VENKATESH3, & M. KRISHNAMOORTHY4,
17. INTERNATIONAL RESEARCH JOURNAL OF MULTIDISCIPLINARY STUDIES,Vol. 2, Issue 5, May, 2016 ISSN (Online): 2454-8499 Impact Factor: 1.3599(GIF),0.679(IIFS) 1Manasi Kulkarni (Killedar),2Dr. C. N. Rawal